

**SYSTEM AND METHOD FOR IDENTIFYING
AND ELIMINATING BOTTLENECKS IN
INTEGRATED CIRCUIT DESIGNS**

ABSTRACT OF THE INVENTION

A method of integrated circuit design and a circuit design tool. Critical paths are identified in an integrated circuit design. Identified edges are weighted. Edges are assigned a higher weight responsive to the number of critical paths in which they are included. A net criticality is assigned to each weighted edge based upon the edge's weight. Cells are re-placed and wired according to net criticality.